NSERC CRSNG

Canadian Common CV commun canadien

Professor Dror Bar-Natan

Language Skills

Language	Read	Write	Speak	Understand	Peer Review
English	Yes	Yes	Yes	Yes	Yes
Hebrew	Yes	Yes	Yes	Yes	Yes

Degrees

- 1991/6   Doctorate, Mathematics, Princeton University
- 1984/6   Bachelor's, Mathematics, Tel-Aviv University

User Profile

Research Specialization Keywords: Computer Algebra, Knot Theory, Low Dimensional Topology, Quantum Algebra

Employment

2006/7   Professor
                  Mathematics, University of Toronto
                  Full-time, Professor
                  Tenure Status: Tenure
                  Teaching and research in Mathematics.

2002/7 - 2006/6   Associate Professor of Mathematics
                  Mathematics, University of Toronto
                  Full-time, Associate Professor
                  Tenure Status: Tenure
                  Teaching and research in Mathematics.

1997/9 - 2002/8   Associate Professor of Mathematics
                  Mathematics, The Hebrew University of Jerusalem
                  Full-time, Associate Professor
                  Tenure Status: Tenure
                  Research and teaching in mathematics

2000/1 - 2000/6   Research visitor
                  N/A, Mathematical Sciences Research Institute
                  Full-time, Visiting Professorship, Associate Professor
                  Tenure Status: Non Tenure Track
                  Research in Mathematics

1999/7 - 1999/8	Visiting Miller Professor
	Mathematics, University of California, Berkeley
	Full-time, Visiting Professorship, Associate Professor
	Tenure Status: Non Tenure Track
	Research in Mathematics
1995/9 - 1997/8	Senior Lecturer of Mathematics
	Mathematics, The Hebrew University of Jerusalem
	Full-time, Assistant Professor
	Tenure Status: Tenure Track
	Research and teaching in Mathematics
1991/7 - 1995/6	Benjamin Peirce Assistant Professor
	Mathematics, Harvard University
	Full-time, Assistant Professor
	Tenure Status: Non Tenure Track
	Research and teaching in Mathematics
1984/8 - 1987/8	Compulsory military service
	Israeli Army
	Taught high school level mathematics

Leaves of Absence and Impact on Research

2013/1 - 2013/12	Sabbatical, University of Toronto
	Research on w-knotted objects and the Kashiwara-Vergne problem.

Research Funding History

Awarded [n=1]

2013/4 - 2018/3 Principal Applicant	NSERC Discovery Grant, Grant
	Funding Sources:
	Natural Sciences and Engineering Research Council of Canada (NSERC)
	Discovery
	Total Funding - 145,000
	Portion of Funding Received - 100
	Funding Competitive?: Yes

Completed [n=3]

2013/7 - 2013/12 Principal Applicant	Simons Sabbatical Grant, Fellowship
	Funding Sources:
	Simons Foundation (The) (USA)
	Simons Sabbatical Grant
	Total Funding - 129,755
	Portion of Funding Received - 100
	Funding Competitive?: Yes
2008/4 - 2013/3 Principal Applicant	NSERC Discovery Grant, Grant
	Funding Sources:
	Natural Sciences and Engineering Research Council of Canada (NSERC)
	Discovery
	Total Funding - 140,000
	Portion of Funding Received - 100

Funding Competitive?: Yes

2009/4 - 2012/5
Principal Applicant

NSERC Accelerator Grant, Grant

Funding Sources:
Natural Sciences and Engineering Research Council of Canada (NSERC)
Discovery Accelerator Program
Total Funding - 120,000
Portion of Funding Received - 100
Funding Competitive?: Yes

Student/Postdoctoral Supervision

Bachelor's [n=3]

2017/5 - 2017/9
Principal Supervisor

Calder Morton-Ferguson (In Progress) , University of Toronto
Student Degree Expected Date: 2019/6
Thesis/Project Title: Notes on Basic 3-Manifold Topology: A Visual Companion
Present Position: Undergraduate Student, University of Toronto

2015/10 - 2017/5
Principal Supervisor

Andrey Khsein (In Progress) , University of Toronto
Student Degree Expected Date: 2019/6
Thesis/Project Title: A Tabulation of Ribbon Knots in Tangle Form and The 250 Knots with up to 10 Crossings
Present Position: Undergraduate Student, University of Toronto

2011/5 - 2011/9
Academic Advisor

Qin Deng (Completed) , University of Toronto
Thesis/Project Title: Combinatorics and Dynamical Systems
Present Position: Graduate Student, University of Toronto

Master's non-Thesis [n=5]

2017/9 - 2019/6
Academic Advisor

Leonard Okyere Afeke (In Progress) , University of Toronto
Student Degree Expected Date: 2019/6
Thesis/Project Title: TBD.
Present Position: Graduate Student, University of Toronto

2016/4 - 2016/9
Principal Supervisor

Jesse Bettencourt (Completed) , University of Toronto
Thesis/Project Title: Torus Knot Fibrations
Present Position: Graduate Student

2014/5 - 2014/9
Principal Supervisor

Jonathan Zung (Completed) , University of Toronto
Thesis/Project Title: Finite Type Invariants of Doodles
Present Position: Graduate Student, Princeton University

2012/5 - 2012/9
Principal Supervisor

Sam Selmani (Completed) , University of Toronto
Thesis/Project Title: Meta-Monoids, Meta-Bicrossed Products, and the Alexander Polynomial
Present Position: Entrepreneur, Oligo Medic

2011/5 - 2011/9
Co-Supervisor

Emily Cliff (Completed) , University of Toronto
Thesis/Project Title: The Belavin-Drinfel'd classification of Lie bialgebras
Present Position: J.L. Doob Research Assistant Professor, University of Illinois at Urbana-Champaign

Doctorate [n=8]

2017/9 - 2021/6 Academic Advisor	Robin Gaudreau (In Progress) , University of Toronto Student Degree Expected Date: 2021/6 Thesis/Project Title: TBD Present Position: Graduate Student, University of Toronto
2014/7 - 2018/7 Principal Supervisor	Travis Ens (In Progress) , University of Toronto Student Degree Expected Date: 2018/7 Thesis/Project Title: Braidors and Grothendieck-Teichmuller Groups Present Position: Graduate Student, University of Toronto
2013/9 - 2018/7 Principal Supervisor	Huan Vo (In Progress) , University of Toronto Student Degree Expected Date: 2018/7 Thesis/Project Title: On Meta-Monoids and the Alexander Polynomial Present Position: Graduate Student, University of Toronto
2011/9 - 2016/8 Co-Supervisor	Iva Halacheva (Completed) , University of Toronto Thesis/Project Title: Alexander Type Invariants of Tangles, Skew Howe Duality for Crystals and the Cactus Group Present Position: Post-Doc, Lancaster University, England
2010/1 - 2015/8 Principal Supervisor	Oleg Chterental (Completed) , University of Toronto Thesis/Project Title: Virtual Braids and Virtual Curve Diagrams Present Position: Searching
2006/9 - 2011/8 Principal Supervisor	Zsuzsanna Dancso (Completed) , University of Toronto Thesis/Project Title: On a Universal Finite Type Invariant of Knotted Trivalent Graphs Present Position: Lecturer (tenure stream equiv.), University of Sydney (Australia)
2006/3 - 2012/8 Principal Supervisor	Karene Chu (Completed) , University of Toronto Thesis/Project Title: Flat Virtual Pure Tangles Present Position: Curriculum Development, MIT
2005/5 - 2011/12 Principal Supervisor	Peter Lee (Completed) , University of Toronto Thesis/Project Title: The Pure Virtual Braid Group Is Quadratic Present Position: Lawyer, Blakes Law Firm

Post-doctorate [n=4]

2015/9 - 2016/5 Principal Supervisor	Ester Dalvit (Completed) , University of Toronto Thesis/Project Title: Animations of Ribbon Knots in 4D Present Position: Volunteer in Kosovo
2012/8 - 2015/6 Co-Supervisor	Peter Samuelson (Completed) , University of Toronto Thesis/Project Title: Representation theory, knot invariants, character varieties, Hecke algebras, Hall algebras Present Position: Post-Doc, University of Edinburgh
2012/5 - 2014/6 Co-Supervisor	David Penneys (Completed) , University of Toronto Thesis/Project Title: Subfactor theory, tensor and fusion categories, quantum algebra, mathematical physics, and non-commutative geometry. Present Position: Assistant Professor, Ohio State University
2010/6 - 2011/12 Principal Supervisor	Daniel Moskovich (Completed) , University of Toronto Thesis/Project Title: Quantum topology, quantum information, coloured tangles, noncommutative probability. Present Position: Researcher, Mechanical Engineering Department, Ben-Gurion University

Event Administration

2011/5 - 2011/5   Co-organizer, Swiss Knots 2011, Conference, 2011/5 - 2011/5

Presentations

1.   (2017). The Dogma is Wrong. Seminar talk, Sydney, Australia
     Main Audience: Researcher
     Invited?: Yes, Keynote?: No

2.   (2017). Nobody Solves the Quintic. Undergraduate Lecture, Sydney, Australia
     Main Audience: Knowledge User
     Invited?: Yes, Keynote?: No

3.   (2017). The Dogma is Wrong. Lie Groups in Mathematics and Physics Conference, Les Diablerets,
     Switzerland
     Main Audience: Researcher
     Invited?: Yes, Keynote?: Yes

4.   (2017). The Dogma is Wrong. Quantum Topology and Geometry in Toulouse, Toulouse, France
     Main Audience: Researcher
     Invited?: Yes, Keynote?: Yes

5.   (2017). What else can you do with solvable approximations?. McGill University HEP Seminar, Montreal,
     Canada
     Main Audience: Researcher
     Invited?: Yes, Keynote?: No

6.   (2017). The Dogma is Wrong. AMS Fall Eastern Sectional Meeting, Buffalo, United States
     Main Audience: Researcher
     Invited?: Yes, Keynote?: No

7.   (2016). The Brute and the Hidden Paradise. Four lectures at the "GRT, MZVs and associators" conference,
     Les Diablerets, Switzerland
     Main Audience: Researcher
     Invited?: Yes, Keynote?: Yes

8.   (2016). A Poly-Time Knot Polynomial Via Solvable Approximation. Seminar talk, Chapel Hill, United States
     Main Audience: Researcher
     Invited?: Yes, Keynote?: No

9.   (2016). The Kashiwara-Vergne Problem and Topology. Leiden Colloquium, Leiden, Netherlands
     Main Audience: Researcher
     Invited?: Yes, Keynote?: Yes

10. (2016). A Poly-Time Knot Polynomial Via Solvable Approximation. Seminar talk at Indiana University,
     Bloomingtion, United States
     Main Audience: Researcher
     Invited?: Yes, Keynote?: Yes

11. (2016). The Kashiwara-Vergne Problem and Topology. Northeastern Colloquium, Boston, United States
     Main Audience: Researcher
     Invited?: Yes, Keynote?: Yes

12. (2016). Polynomial Time Knot Polynomials. Advances in Quantum and Low-Dimensional Topology 2016,
     Iowa City, United States
     Main Audience: Researcher
     Invited?: Yes, Keynote?: Yes

13. (2016). Name What You See: The 17 Tiling Patterns. Science Rendezvous, Toronto, Canada
Main Audience: General Public
Invited?: Yes, Keynote?: No

14. (2016). A Poly-Time Knot Polynomial Via Solvable Approximation. Massachusetts Institute of Technology seminar, Cambridge, United States
Main Audience: Researcher
Invited?: Yes, Keynote?: No

15. (2016). A Poly-Time Knot Polynomial Via Solvable Approximation. Geometric Representation Theory Seminar, Toronto, Canada
Main Audience: Researcher
Invited?: Yes, Keynote?: No

16. (2016). On Elves and Invariants. Knots in Washington XLIII, George Washington University, Washington DC, United States
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

17. (2016). Gauss-Gassner Invariants. Knots in the Triangle (Knots in Washington XLII), North Carolina State University, Raleigh, United States
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

18. (2016). The Hardest Math I've Ever Really Used. Public Lecture, Canadian Mathematical Society Winter Meeting, Niagara Falls, Canada
Main Audience: General Public
Invited?: Yes, Keynote?: Yes

19. (2016). The Brute and the Hidden Paradise. Knots in Hellas, Olympia, Greece
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

20. (2015). The Kashiwara-Vergne Problem and Topology. Colloquium at Carnegie Mellon University, Pittsburgh, United States
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

21. (2015). Knots in Three and Four Dimensions. Kieval Lecture, Cornell University, Ithaca, United States
Main Audience: Knowledge User
Invited?: Yes, Keynote?: Yes

22. (2015). Commutators. Math Union Guest Speaker, Toronto, Canada
Main Audience: Knowledge User
Invited?: Yes, Keynote?: No

23. (2015). Polynomial Time Knot Polynomials. AMS Central Fall Sectional Meeting, Loyola University, Chicago, United States
Main Audience: Researcher
Invited?: Yes, Keynote?: No

24. (2015). Knots in Three and Four Dimensions. High School Talk, Toronto, Canada
Main Audience: General Public
Invited?: Yes, Keynote?: No

25. (2015). The 17 Tiling Patterns: Gotta Catch 'Em All!. Gifted Conference, TCDSB, Toronto, Canada
Main Audience: General Public
Invited?: Yes, Keynote?: Yes

26. (2015). Commutators. Undergraduate Lecture at Carnegie Mellon University, Pittsburgh, United States
Main Audience: Knowledge User
Invited?: Yes, Keynote?: No

27. (2015). When does a group have a Taylor expansion?. AMS Spring Eastern Sectional Meeting, Georgetown University, Washington DC, United States
Main Audience: Researcher
Invited?: Yes, Keynote?: No

28. (2015). The 17 Tiling Patterns: Gotta Catch 'Em All!. Math Union Guest Speaker, Toronto, Canada
Main Audience: Knowledge User
Invited?: Yes, Keynote?: No

29. (2015). Crossing the Crossings. "Knots and Representation Theory" seminar, Moscow (by web), Moscow (by video), Russian Federation
Main Audience: Researcher
Invited?: Yes, Keynote?: No

30. (2015). Expansions. Five Chaire de la Vallée-Poussin talks in Louvain-la-Neuve, Louvain-la-Neuve, Belgium
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

31. (2015). Polynomial Time Knot Polynomials. International Conference on Subfactor Theory in Mathematics and Physics, Qinhuangdao, China
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

32. (2015). Polynomial Time Knot Polynomials. Two talks at a "GRT, MZVs and associators" conference, Les Diablerets, Switzerland
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

33. (2015). Polynomial Time Knot Polynomials. New developments in TQFT, Aarhus, Denmark
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

34. (2014). On Maps, Machines and Roaches. "Legacy of Vladimir Arnold" Conference, Toronto, Canada
Main Audience: General Public
Invited?: Yes, Keynote?: Yes

35. (2014). Some very good formulas for the Alexander polynomial. Algebraic Structures in Low-Dimensional Topology, Oberwolfach, Germany
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

36. (2014). The 17 Worlds of Planar Ants. Classroom Adventures in Mathematics, Toronto, Canada
Main Audience: Knowledge User
Invited?: Yes, Keynote?: Yes

37. (2014). Visualizing the Fourth Dimension, and the Simplest Thing I Don't Know About It. Classroom Adventures in Mathematics, Toronto, Canada
Main Audience: Knowledge User
Invited?: Yes, Keynote?: Yes

38. (2014). The Kashiwara-Vergne Problem and Topology. Quantum Topology Conference, Lake Bannoye, Russian Federation
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

39. (2014). Knots in Four Dimensions and the Simplest Open Problem About Them. Eshnav LaMatematika (general public series in the Hebrew University), Jerusalem, Israel
Main Audience: General Public
Invited?: Yes, Keynote?: Yes

40. (2014). Tangles, Wheels, Balloons. 2014 CMS Winter Meeting, Hamilton, Canada
Main Audience: Researcher
Invited?: Yes, Keynote?: No

41. (2014). The 17 Worlds of Planar Ants. Canada Math Camp, Toronto, Canada
Main Audience: General Public
Invited?: Yes, Keynote?: No

42. (2014). The 17 Tiling Patterns: Gotta Catch 'Em All!. Treehouse Talks, Toronto, Toronto, Canada
Main Audience: General Public
Invited?: Yes, Keynote?: Yes

43. (2014). Some very good formulas for the Alexander polynomial. Quantum Topology Conference, Lake Bannoye, Russian Federation
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

44. (2014). Dessert: Hilbert's 13th Problem, in Full Colour. "Legacy of Vladimir Arnold" Conference, Toronto, Canada
Main Audience: Knowledge User
Invited?: Yes, Keynote?: Yes

45. (2014). Trees and Wheels and Balloons and Hoops. Seminar in McMaster University, Hamilton, Canada
Main Audience: Researcher
Invited?: Yes, Keynote?: No

46. (2014). A Partial Reduction of BF Theory to Combinatorics. Modern Trends in Topological Quantum Field Theory, Vienna, Austria
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

47. Jonathan Zung. (2014). Finite Type Invariants of Doodles. "Legacy of Vladimir Arnold" Conference, Toronto, Canada
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

48. (2013). Non-Commutative Gaussian Elimination and Rubik's Cube. Visit to Nanyang Technological University, Singapore
Main Audience: Knowledge User
Invited?: Yes, Keynote?: No

49. (2013). Trees and Wheels and Balloons and Hoops and Why I Care. Colloquium, University of Toronto, Toronto, Canada
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

50. (2013). (u, v, and w knots) x (topology, combinatorics, low algebra, and high algebra). Two weeks of lecturing in a Master Class at Aarhus University, Aarhus, Denmark
Main Audience: Knowledge User
Invited?: Yes, Keynote?: Yes

51. (2013). Meta-Groups, Meta-Bicrossed-Products, and the Alexander Polynomial. Geneva Geometry and Topology Seminar, Geneva, Switzerland
Main Audience: Researcher
Invited?: Yes, Keynote?: No

52. (2013). Trees and Wheels and Balloons and Hoops. Quantum Topology and Hyperbolic Geometry, Nha Trang, Vietnam, Nha Trang, Viet Nam
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

53. (2013). The Hardest Math I've Ever Really Used. Canada Math Camp, Toronto, Canada
Main Audience: Knowledge User
Invited?: Yes, Keynote?: Yes

54. (2013). Trees and Wheels and Balloons and Hoops. Visit to Nanyang Technological University, Singapore
Main Audience: Researcher
Invited?: Yes, Keynote?: No

55. (2013). Balloons and Hoops and their Universal Finite Type Invariant, BF Theory, and an Ultimate Alexander Invariant. Seminar in Oxford, Oxford, United Kingdom
Main Audience: Researcher
Invited?: Yes, Keynote?: No

56. (2013). A Quick Introduction to Khovanov Homology. Two talks at SMS 2013, Physics and Mathematics of Link Homology, Montreal, Canada
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

57. (2013). The Hardest Math I've Ever Really Used. Visit to Nanyang Technological University, Singapore
Main Audience: General Public
Invited?: Yes, Keynote?: No

58. (2013). The Kashiwara-Vergne Problem and Topology. Lausanne Topology and Geometry Seminar, Lausanne, Switzerland
Main Audience: Researcher
Invited?: Yes, Keynote?: No

59. (2013). Meta-Groups, Meta-Bicrossed-Products, and the Alexander Polynomial. Grenoble Topology seminar, Grenoble, France
Main Audience: Researcher
Invited?: Yes, Keynote?: No

60. (2013). Informal Talks on the Topology, Combinatorics, and Low and High Algebra of w-Knots. Six talks at the University of Zurich, Zurich, Switzerland
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

61. (2013). Meta-Groups, Meta-Bicrossed-Products, and the Alexander Polynomial. Ben-Gurion University Colloquium, Beer-Sheva, Israel
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

62. (2013). Finite Type Invariants of Ribbon Knotted Balloons and Hoops. Geneva Geometry and Topology Seminar, Geneva, Switzerland
Main Audience: Researcher
Invited?: Yes, Keynote?: No

63. (2013). Trees and Wheels and Balloons and Hoops. ETH Zurich Seminar, Zurich, Switzerland
Main Audience: Researcher
Invited?: Yes, Keynote?: No

64. (2013). Meta-Groups, Meta-Bicrossed-Products, and the Alexander Polynomial. University of Sheffield Maths Colloquium, Sheffield, United Kingdom
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

65. (2013). Trees and Wheels and Balloons and Hoops and More Later. Geneva Seminar, Geneva, Switzerland
Main Audience: Researcher
Invited?: Yes, Keynote?: No

66. (2013). Meta-Groups, Meta-Bicrossed-Products, and the Alexander Polynomial. Seminar at Imperial College London, London, United Kingdom
Main Audience: Researcher
Invited?: Yes, Keynote?: No

67. (2013). The Kashiwara-Vergne Problem and Topology. Grenoble colloquium, Grenoble, France
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

68. (2013). Trees and Wheels and Balloons and Hoops. Geometry/Topology Seminar, University of Chicago, Chicago, United States
Main Audience: Researcher
Invited?: Yes, Keynote?: No

69. (2013). The Kashiwara-Vergne Problem and Topology. Bern Colloquium, Bern, Switzerland
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

70. (2013). On Maps, Machines and Roaches, an introduction to cut-and-paste topology. Classroom Adventures in Mathematics, Toronto, Canada
Main Audience: Knowledge User
Invited?: Yes, Keynote?: Yes

71. (2013). Meta-Groups, Meta-Bicrossed-Products, and the Alexander Polynomial. SMS 2013, Physics and Mathematics of Link Homology, Montreal, Canada
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

72. (2013). Meta-Groups, Meta-Bicrossed-Products, and the Alexander Polynomial. Grothendieck-Teichmüller Groups, Deformation and Operads conference at the Newton Institute, Cambridge, United Kingdom
Main Audience: Researcher
Invited?: Yes, Keynote?: No

73. (2013). Braids and the Grothendieck-Teichmuller Group. Grothendieck-Teichmüller Groups, Deformation and Operads conference at the Newton Institute, Cambridge, United Kingdom
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

74. (2013). Visualizing the Fourth Dimension, and the Simplest Thing I Don't Know About It. Canadian Undergraduate Mathematical Conference, Montreal, Canada
Main Audience: Knowledge User
Invited?: Yes, Keynote?: Yes

75. (2013). Non-Commutative Gaussian Elimination and Rubik's Cube. Adams Society, St. John's College, University of Cambridge, Cambridge, United Kingdom
Main Audience: Knowledge User
Invited?: Yes, Keynote?: No

76. (2012). On Maps, Machines and Roaches, an introduction to cut-and-paste topology. Canada Math Camp, Toronto, Canada
Main Audience: Knowledge User
Invited?: Yes, Keynote?: Yes

77. (2012). v- and w-Knotted Objects. Seven days of lecturing at a Caen Workshop on v- and w-Knotted Objects, Caen, France
    Main Audience: Researcher
    Invited?: Yes, Keynote?: Yes

78. (2012). Meta-Groups, Meta-Bicrossed-Products, and the Alexander Polynomial. Binghamton University Math Colloquium, Binghamton, United States
    Main Audience: Researcher
    Invited?: Yes, Keynote?: Yes

79. (2012). Balloons and Hoops and their Universal Finite Type Invariant, BF Theory, and an Ultimate Alexander Invariant. New Perspectives in Topological Field Theories, Germany
    Main Audience: Researcher
    Invited?: Yes, Keynote?: Yes

80. (2012). A Quick Introduction to Khovanov Homology. New Perspectives in Topological Field Theories, Hamburg, Germany
    Main Audience: Researcher
    Invited?: Yes, Keynote?: Yes

81. (2012). Meta-Groups, Meta-Bicrossed-Products, and the Alexander Polynomial. 2012 CMS Summer Meeting, Regina, Canada
    Main Audience: Researcher
    Invited?: Yes, Keynote?: Yes

82. (2012). Meta-Groups, Meta-Bicrossed-Products, and the Alexander Polynomial. Seminar at the University at Buffalo, Buffalo, United States
    Main Audience: Researcher
    Invited?: Yes, Keynote?: No

83. (2012). Meta-Groups, Meta-Bicrossed-Products, and the Alexander Polynomial. Knots in Washington XXXIV, Washington DC, United States
    Main Audience: Researcher
    Invited?: Yes, Keynote?: Yes

84. (2012). The Hardest Math I've Ever Really Used. Science Atlantic Conference, Mt. Allison University, Sackville, Canada
    Main Audience: Knowledge User
    Invited?: Yes, Keynote?: Yes

85. (2011). The Hardest Math I've Ever Really Used. Royal Canadian Institute Lecture, Toronto, Canada
    Main Audience: General Public
    Invited?: Yes, Keynote?: Yes

86. (2011). Expansions: A Loosely Tied Traverse from Feynman Diagrams to Quantum Algebra. Six lectures in a summer school "Geometric, Algebraic, and Topological Methods for Quantum Field Theory"., Villa de Leyva, Colombia
    Main Audience: Researcher
    Invited?: Yes, Keynote?: Yes

87. (2011). Facts and Dreams About v-Knots and Etingof-Kazhdan. Quantum Groups, Categorification, and Braids: Conference on the Occasion of Christian Kassel's 60th Birthday, Strasbourg, France
    Main Audience: Researcher
    Invited?: Yes, Keynote?: Yes

88. (2011). From the ax+b Lie Algebra to the Alexander Polynomial. Seminar in Geneva, Geneva, Switzerland
    Main Audience: Researcher
    Invited?: Yes, Keynote?: No

89. (2011). The Hardest Math I've Ever Really Used. Fall 2011 Meeting of the MAA Seaway Section, Allegany, NY, United States
Main Audience: Knowledge User
Invited?: Yes, Keynote?: Yes

90. (2011). Facts and Dreams About v-Knots and Etingof-Kazhdan. Swiss Knots 2011, Thun, Switzerland
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

91. Peter Lee.(2011). The Pure Virtual Braid Group is Quadratic. University of Oregon seminar., Eugene, United States
Main Audience: Researcher
Invited?: No, Keynote?: No

92. (2011). Cosmic Coincidences and Several Other Stories. University of Tennessee Colloquium, Knoxville, United States
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes

93. (2011). The Hardest Math I've Ever Really Used. Canadian Perspectives Lecture, University of Toronto, Toronto, Canada
Main Audience: General Public
Invited?: Yes, Keynote?: Yes

94. (2011). Braids and the Grothendieck-Teichmuller Group. University of Toronto's Symplectic Geometry Seminar, Toronto, Canada
Main Audience: Researcher
Invited?: Yes, Keynote?: No

Publications

Journal Articles

1. Bar-Natan D., Dancso Z.(2017). Finite Type Invariants of w-Knotted Objects II: Tangles, Foams and the Kashiwara-Vergne Problem. Mathematische Annalen. 367: 1517-1586.
Published
Refereed?: Yes, Open Access?: Yes

2. Bar-Natan D., Dancso Z.(2016). Finite Type Invariants of w-Knotted Objects I: w-Knots and the Alexander Polynomial. Algebraic and Geometric Topology. 16(2): 1063-1133.
Published
Refereed?: Yes, Open Access?: Yes

3. Bar-Natan D., Vo H. (*). (2015). Proof of a Conjecture of Kulakova et al. Related to the sl(s) Weight System. European Journal of Combinatorics. 45: 65-70.
Published
Refereed?: Yes, Open Access?: Yes

4. Bar-Natan D.(2015). Balloons and Hoops and their Universal Finite Type Invariant, BF Theory, and an Ultimate Alexander Invariant. Acta Mathematica Vietnamica. 40(2): 271-329.
Published
Refereed?: Yes, Open Access?: Yes

5. Bar-Natan D.(2015). A Note on the Unitarity Property of the Gassner Invariant. Bulletin of Chelyabinsk State University (Mathematics, Mechanics, Informatics). 3-358-17: 22-25.
Published
Refereed?: Yes, Open Access?: Yes

6.   Bar-Natan D., Burgos-Soto H.(2014). Khovanov Homology for Alternating Tangles. Journal of Knot Theory and its Ramifications. 23(2): 1-22.
Published
Refereed?: Yes, Open Access?: Yes

7.   Bar-Natan D.(2013). Review of a Book by Chmutov, Duzhin, and Mostovoy. Buletin of the American Mathematical Society. 50: 685-690.
Published
Refereed?: No, Open Access?: Yes

8.   Bar-Natan D., Selmani S. (*). (2013). Meta-Monoids, Meta-Bicrossed Products, and the Alexander Polynomial. Journal of Knot Theory and its Ramifications. 22(10): 1-17.
Published
Refereed?: Yes, Open Access?: Yes

9.   Bar-Natan D., Dancso Z.(*). (2013). Homomorphic Expansions for Knotted Trivalent Graphs. Journal of Knot Theory and Its Ramifications. 22(1): 1-33.
Published
Refereed?: Yes, Open Access?: Yes

10.   Bar-Natan, D., Dancso Z.(*).(2012). Pentagon and Hexagon Equations Following Furusho. Proceedings of the American Mathematical Society. 140(4): 1243-1250.
Published
Refereed?: Yes, Open Access?: Yes

11.   Bar-Natan D., Halacheva I.(*), Leung L. (*), Roukema F.(*). (2011). Some Dimensions of Spaces of Finite Type Invariants of Virtual Knots. Experimental Mathematics. 20(3): 282-287.
Published
Refereed?: Yes, Open Access?: Yes

Book Chapters

1.   Bar-Natan D.(2017). On Raoul Bott's "On Invariants of Manifold". Tu Loring. Raoul Bott's collected works. (5): 1-2.
Accepted, Unknown
Refereed?: No